## AMENDMENTS TO THE CLAIMS

**In the claims:**

1. (currently amended) A computer program product comprising a computer-readable medium having stored thereon instructions for causing a computer to perform a process for assessing business solutions comprising alternative network architectures and management processes for a telecommunications network, the computer program product comprising instructions for:

(a) receiving data and options for plurality of network architectures, network management processes, and service and customer management processes;

(b) engineering the plurality of network architectures based on the data and options of (a);

(c) determining suppliers' equipment costs for said plurality of network architectures;

(d) engineering the network management processes and the service and customer management processes, based on the data and options of (a), for managing said plurality of network architectures;

(e) determining suppliers' management processes costs for the network management processes and the service and customer management processes;

(f) validating and calibrating the data and options and the costs for the plurality of network architectures, the network management processes, and the service and customer management processes;

(g) determining, based on the costs of the plurality of network architectures and the network management processes and the service and customer management processes, business parameters for the business solutions; and

(h) storing and displaying the business parameters for the business solutions for the telecommunications network. ~~An operations, management, capacity, and services (OMCS) tool comprising: a means for analyzing business parameters for a plurality of network architectures; and a means~~

~~for comparing the business parameters for said network architectures for determining cost savings of one network architecture versus another and for determining a business solution that articulates the network architecture for reducing total expenditure.~~

2. (currently amended) ~~A tool~~ The computer program product as described in claim 1, wherein the instructions (a) comprise instructions for causing the computer to receive traffic data; customer data; and financial and labor data ~~business parameters comprise the total expenditure; and wherein the total expenditure comprises capital expenditure (CAPEX) and operational expenditure (OPEX)~~.

3. (currently amended) ~~A tool~~ The computer program product as described in claim 2, wherein the instructions (a) further comprise instructions for causing the computer to:

- receive technology options which comprise at least one of: time division multiplexing (TDM), asynchronous transfer mode (ATM), frame relay (FR), Internet protocol (IP), virtual private network (VPN), multi protocol label switching (MPLS), and optical Ethernet including fiber, synchronous optical network (SONET), resilience packet ring (RPR), and dense wavelength division multiplexing (DWDM) for a network architecture for a business solution;
- receive options for the network management processes which comprise at least one of: inside plant maintenance, outside plant maintenance, network engineering, network provisioning, installation, testing, and repairs for managing the network architecture for the business solution; and
- receive options for the service and customer management processes which comprise at least one of: customer relationship management (CRM), work order management (WOM), network inventory management (NIM), service activation and provisioning (SAP), fault management (FM), performance management (PM), accounting and billing, and security management for managing the network architecture for the business

solution ~~CAPEX comprises a network architecture cost, taxes, interests, and deprecation and amortization (D/A) expenses; and the OPEX comprises a management processes cost, a leasing cost, and sales, general and administration (SG&A) expenses~~.

4. (currently amended) ~~A tool~~ The computer program product as described in claim [[2]] 1, wherein the instructions (g) comprise instructions for causing the computer to:

- compute the business parameters for the business solutions over a pre-determined study period; and
- determine the business parameters which comprise at least one of: capital expenditure (CAPEX), wherein the CAPEX comprises a network architecture cost, taxes, interests, and depreciation and amortization (D/A) expenses; operational expenditure (OPEX), wherein the OPEX comprises a management processes cost, a leasing cost, and sales, general and administration (SG&A); revenue; capacity; return on investment (ROI); earnings before interest, taxes, and depreciation and amortization (EBITDA); earnings before interest and taxes (EBIT); the OPEX as percentage of the revenue; and total expenditure as percentage of the revenue, wherein the total expenditure comprises the CAPEX and the OPEX ~~business parameters further comprise revenue; capacity; return on investment (ROI); earnings before interest, taxes, and deprecation and amortization (EBITDA); earnings before interest and taxes (EBIT); OPEX as percentage of revenue; and total expenditure as percentage of revenue~~.

5. (currently amended) ~~A tool~~ The computer program product as described in claim [[1]] 3, wherein the instructions (b) comprise instructions for causing the computer to engineer the network architecture for the business solution ~~means for analyzing the business parameters comprises a means for analyzing the business parameters for a network architecture having one or more of the following technology: TDM, ATM, FR, IP, VPN, MPLS, and optical Ethernet including fiber, SONET, RPR, and DWDM~~.

6. (currently amended) ~~A tool~~ The computer program product as described in claim [[5]] 3, wherein the instructions (d) comprise instructions for causing the computer to engineer the network management processes and the service and customer management processes for managing the network architecture for the business solution ~~means for analyzing the business parameters for the plurality of network architectures comprises a means for computing the business parameters for each of said network architectures over a pre-determined study period~~.

7. (currently amended) ~~A tool~~ The computer program product as described in claim [[6]] 4, wherein the instructions (h) comprise instructions for causing the computer to display the business parameters in tables and graphical charts for the business solutions over the pre-determined study period ~~means for comparing the business parameters for the plurality of network architectures comprises a means for reporting the business parameters for each of said network architectures over said pre-determined study period; and wherein the business solution comprises the network architecture with the least total expenditure~~.

8. (currently amended) ~~A tool~~ The computer program product as described in claim [[3]] 5, wherein the instructions (c) comprise instructions for causing the computer to determine a network architecture cost and a leasing cost for the network architecture for the business solution ~~further comprises: a means for engineering a plurality of network architectures for a pre-determined input user data; a means for determining a network architecture cost and a leasing cost for each of said network architectures over a pre-determined study period; a means for engineering management processes for managing each of said network architectures; and a means for determining a management processes cost for said management processes over said pre-determined study period~~.

9. (currently amended) ~~A tool~~ The computer program product as described in claim 8, wherein the instructions (f) comprise instructions for causing the computer to validate and calibrate the data and options; the network architecture cost; and the leasing cost for said network architecture for the business solution ~~further comprises: a means for inputting user data; and a means for validating and calibrating the input user data; the network architecture cost; the leasing cost; and the management processes cost for each of said network architectures~~.

10. (currently amended) ~~A tool~~ The computer program product as described in claim 8, wherein the ~~means for engineering the plurality of network architectures comprises a means for determining~~ instructions (b) further comprise instructions for causing the computer to determine an owned network elements (NEs) count; a leased NEs count; an owned customer premise equipment (CPE) count; a leased CPE count; an owned links count; a leased links count; and a leased ports count for ~~each of~~ said network architecture ~~architectures~~; and wherein said network architecture ~~architectures~~ having NEs, CPE, and links from the same or different equipment suppliers.

11. (currently amended) ~~A tool~~ The computer program product as described in claim 10, wherein the instructions (c) further comprise instructions for causing the computer to determine a price per network element (NE), a footprint per NE cost, a power consumption per NE cost; a price per CPE, a footprint per CPE cost, and a power consumption per CPE cost; and a price per link and a link transmission rate ~~means for determining the network architecture cost and the leasing cost for each of the plurality of network architectures comprises: a means for determining a price per network element (NE), a footprint per NE cost, and a power consumption per NE cost; a means for determining a price per CPE, a footprint per CPE cost, and a power consumption per CPE cost; and a means for determining a price per link and a link transmission rate~~.

12. (currently amended) ~~A tool~~ The computer program product as described in claim 11, wherein the [[means]] instructions for determining the network

architecture cost ~~comprises a means for computing~~ comprise instructions for causing the computer to compute a total owned NEs cost; a total owned CPE cost; and a total owned links cost for ~~each of~~ said network ~~architectures~~ architecture for the business solution ~~over said pre-determined study period~~; and wherein the [[means]] instructions for determining the leasing cost ~~comprises a means for computing~~ comprise instructions for causing the computer to compute a total footprints cost and a total power consumptions cost for said owned NEs and CPE ~~over said pre-determined study period~~.

13. (currently amended) ~~A tool~~ The computer program product as described in claim 10, wherein the instructions (c) further comprise instructions for causing the computer to determine a leased per NE cost, a footprint per NE cost, and a power consumption per NE cost; a leased per CPE cost, a footprint per CPE cost, and a power consumption per CPE cost; a leased per link cost; a leased link per unit length cost, a unit length per link count, and a link transmission rate; and a leased per port cost. ~~means for determining the leasing cost further comprises: a means for determining a leased per NE cost, a footprint per NE cost, and a power consumption per NE cost; a means for determining a leased per CPE cost, a footprint per CPE cost, and a power consumption per CPE cost; a means for determining a leased per link cost and a link transmission rate; a means for determining a leased link per unit length cost, a unit length per link count, and a link transmission rate; and a means for determining a leased per port cost.~~

14. (currently amended) ~~A tool~~ The computer program product as described in claim 13, wherein the [[means]] instructions for determining the leasing cost ~~comprises a means for computing~~ comprise instructions for causing the computer to compute a total leased NEs cost; a total leased CPE cost; a total footprints cost and a total power consumptions cost for said leased NEs and CPE; a total leased links cost; a total leased links for unit length cost; and a total leased ports cost for ~~each of~~ said network architecture for the business ~~architectures over said pre-determined study period~~.

15. (currently amended) ~~A tool~~ The computer program product as described in claim [[8]] 6, wherein the instructions (e) comprise instructions for causing the computer to:

- determine a network management processes cost, wherein the network management processes cost comprises costs for inside plant maintenance, outside plant maintenance, network engineering, network provisioning, installation, testing, and repairs for each network element in the network architecture for the business solution;
- determine a service and customer management processes cost, wherein the service and customer management processes cost comprises costs for customer relationship management (CRM), work order management (WOM), network inventory management (NIM), service activation and provisioning (SAP), fault management (FM), performance management (PM), accounting and billing, and security management for each link in the network architecture for the business solution; and
- determine a management processes cost which comprises the network management processes cost and the service and customer management processes cost ~~means for engineering the management processes comprises means for engineering network management processes, and service and customer management processes; and wherein said management processes having processes from the same or different management processes suppliers~~.

16. (currently amended) ~~A tool~~ The computer program product as described in claim 15, wherein the [[means]] instructions for engineering the network management processes ~~comprises a means for selecting one or more~~ comprise instructions for causing the computer to engineer at least one of the following processes: inside plant maintenance; outside plant maintenance; network engineering; network provisioning; installation; testing; and repairs.

17. (currently amended) ~~A tool~~ The computer program product as described in claim 16, ~~wherein the means for determining the management processes cost comprises a means for determining a process cost per NE for each of said network management processes for one or more of the following~~ further comprise instructions for causing the computer to determine the network management processes cost for said network management processes for at least one of: a manual operations mode; a mechanized operations mode; and a manual and mechanized operations mode.

18. (currently amended) ~~A tool~~ The computer program product as described in claim 15, wherein the [[means]] instructions for engineering the service and customer management processes ~~comprises a means for selecting one or more~~ comprise instructions for causing the computer to engineer at least one of the following processes: customer relationship management (CRM); work order management (WOM); network inventory management ([[NDI]] NIM); service activation and provisioning (SAP); fault management (FM); performance management (PM); accounting and billing; and security management.

19. (currently amended) ~~A tool~~ The computer program product as described in claim 18, ~~wherein the means for determining the management processes cost comprises a means for determining a process cost per link for each of said service and customer management processes for one or more of the following~~ further comprises instructions for causing the computer to determine costs of the customer relationship management (CRM); the work order management (WOM); the network inventory management (NIM); the service activation and provisioning (SAP); the fault management (FM); the performance management (PM); the accounting and billing; and the security management for at least one of: a manual operations mode; a mechanized operations mode; and a manual and mechanized operations mode.

20. (canceled)

21. (currently amended) [[A]] The computer program product as described in claim [[20]] 19, wherein the [[means]] instructions for determining the cost of the customer relationship management (CRM) comprise instructions for causing the computer to determine costs for at least one of: a work order entry and validation process; a service delivery and work order processing process; a customer care process; a trouble ticketing process; and a service assurance and performance reporting process ~~receive the data for the plurality of network architectures comprises: a means for causing the computer to receive input user data for said network architectures; a means for causing the computer to receive network architectures data for said network architectures; and a means for causing the computer to receive management processes data for managing each of said network architectures~~.

22. (currently amended) [[A]] The computer program product as described in claim [[21]] 19, wherein the [[means]] instructions for determining the cost of the work order management (WOM) comprise instructions for causing the computer to determine costs for at least one of: a work order processing process; a client management process; a report management process; and an administration management process ~~receive the input user data comprises a means for causing the computer to receive traffic data; customer data; and financial and labour data for the plurality of network architectures~~.

23. (currently amended) [[A]] The computer program product as described in claim [[21]] 19, wherein the [[means]] instructions for determining the cost of the network inventory management (NIM) comprise instructions for causing the computer to determine costs for at least one of: a customer, services, and resources association management process; an equipment management process; and a network management process ~~receive the network architectures data comprises means for causing the computer to receive network elements (NEs) data; CPE data; and links and ports data for the plurality of network architectures~~.

24. (currently amended) [[A]] The computer program product as described in claim [[23]] 19, wherein the [[means]] instructions for determining the cost of the service activation and provisioning (SAP) comprise instructions for causing the computer to determine costs for at least one of: a create a new service process; a customer association process; a process for aligning and synchronizing with billing, maintenance, and performance; and a resource discovery and database quires process ~~receive the network architectures data further comprises a means for causing the computer to receive network architectures options for the plurality of network architectures~~.

25. (currently amended) [[A]] The computer program product as described in claim [[21]] 19, wherein the [[means]] instructions for determining the cost of the fault management (FM) comprise instructions for causing the computer to determine costs for at least one of: a trouble ticketing process; an isolate problem process; and an analysis and resolution for service logic agreement (SLA) process ~~receive the management processes data comprises means for causing the computer to receive network management data; and service and customer management data for managing each of the plurality of network architectures~~.

26. (currently amended) [[A]] The computer program product as described in claim [[25]] 19, wherein the [[means]] instructions for determining the cost of the performance management (PM) comprise instructions for causing the computer to determine costs for at least one of: a collect performance data process; a generate performance reports process; and a validate service logic agreement (SLA) process ~~receive the management processes data further comprises means for causing the computer to receive network management options; and service and customer management options for managing each of said network architectures~~.

27. (canceled)

28. (canceled)

29. (canceled)

30. (canceled)

31. (currently amended) A method for ~~developing business solution~~ assessing business solutions comprising alternative network architectures and management processes for a telecommunications network, the method comprising the steps of instructing a computer to:

(n) receive data and options for plurality of network architectures, network management processes, and service and customer management processes;

(m) engineer the plurality of network architectures based on the data and options of (n);

(u) determine suppliers' equipment costs for said plurality of network architectures;

(v) engineer the network management processes and the service and customer management processes, based on the data and options of (n), for managing said plurality of network architectures;

(w) determine suppliers' management processes costs for the network management processes and the service and customer management processes;

(x) determine, based on the costs of the plurality of network architectures and the network management processes and the service and customer management processes, business parameters for the business solutions;

(y) validate and calibrate the data and options and the costs for the plurality of network architectures and the network management processes and the service and customer management processes; and

(z) store and display the business parameters for the business solutions for the telecommunications network. ~~receiving data for a plurality of network architectures; analyzing the received data to compute business parameters for said network architectures; and comparing said computed business~~

~~parameters for said network architectures for determining cost savings of one network architecture versus another and for determining a business solution that articulates the network architecture for reducing total expenditure.~~

32. (currently amended) [[A]] The method as described in claim 31, wherein the step (x) comprises instructing the computer to:

- compute the business parameters for the business solutions over a pre-determined study period; and
- determine at least one of the business parameters which comprise: capital expenditure (CAPEX), wherein the CAPEX comprises a network architecture cost, taxes, interests, and depreciation and amortization (D/A) expenses; operational expenditure (OPEX), wherein the OPEX comprises a management processes cost, a leasing cost, and sales, general and administration (SG&A); revenue; capacity; return on investment (ROI); earnings before interest, taxes, and depreciation and amortization (EBITDA); earnings before interest and taxes (EBIT); the OPEX as percentage of the revenue; and total expenditure as percentage of the revenue, wherein the total expenditure comprises the CAPEX and the OPEX. ~~business parameters comprise the total expenditure; and wherein the total expenditure comprises CAPEX and OPEX.~~

33. (currently amended) [[A]] The method as described in claim [[32]] 31, wherein the step (n) comprises instructing the computer to:

- receive traffic data, customer data, and labor and financial data;
- receive technology options which comprise at least one of: time division multiplexing (TDM), asynchronous transfer mode (ATM), frame relay (FR), Internet protocol (IP), virtual private network (VPN), multi protocol label switching (MPLS), and optical Ethernet including fiber, synchronous optical network (SONET), resilience packet ring (RPR), and dense wavelength division multiplexing (DWDM) for a network architecture for a business solution;

- receive options for the network management processes which comprise at least one of: inside plant maintenance, outside plant maintenance, network engineering, network provisioning, installation, testing, and repairs for managing the network architecture for the business solution; and
- receive options for the service and customer management processes which comprise at least one of: customer relationship management (CRM), work order management (WOM), network inventory management (NIM), service activation and provisioning (SAP), fault management (FM), performance management (PM), accounting and billing, and security management for managing the network architecture for the business solution. ~~business parameters further comprise revenue, capacity, ROI, EBITDA, EBIT, OPEX as percentage of revenue, and total expenditure as percentage of revenue.~~

34. (currently amended) [[A]] The method as described in claim [[31]] 33, wherein the step (u) comprises instructing the computer to determine a network architecture cost and a leasing cost for the network architecture for the business solution. ~~of receiving data comprises a step of receiving input user data; network architectures data; management processes data; network architectures options; network management processes options; and service and customer management processes options for the plurality of network architectures.~~

35. (currently amended) [[A]] The method as described in claim [[31]] 34, wherein the step (m) comprises instructing the computer to engineer the network architecture for the business solution. ~~of analyzing the business parameters comprises a step of analyzing the business parameters for a network architecture having one or more of the following technology: TDM, ATM, FR, IP, VPN, MPLS, and optical Ethernet including fiber, SONET, RPR, and DWDM.~~

36. (currently amended) [[A]] The method as described in claim [[35]] 33, wherein the step (v) comprises instructing the computer to:

- engineer the network management processes which comprise engineering at least one of the following processes: inside plant maintenance, outside plant maintenance, network engineering, network provisioning, installation, testing, and repairs; and
- engineer service and customer management processes which comprises engineering at least one of the following processes: customer relationship management (CRM), work order management (WOM), network inventory management (NIM), service activation and provisioning (SAP), fault management (FM), performance management (PM), accounting and billing, and security management. ~~of analyzing the business parameters comprises a step of adjusting and updating data for said network architectures.~~

37. (currently amended) [[A]] The method as described in claim [[31]] 36, wherein the step (w) comprises instructing the computer to:

- determine a network management processes cost for the network management processes, which comprises determining costs of inside plant maintenance, outside plant maintenance, network engineering, network provisioning, installation, testing, and repairs for each network element in the network architecture for the business solution for at least one of: a manual operations mode, a mechanized operations mode, and a manual and mechanized operations mode;
- determine a service and customer management processes cost for the service and customer management processes, which comprises determining costs of customer relationship management (CRM), work order management (WOM), network inventory management (NIM), service activation and provisioning (SAP), fault management (FM), performance management (PM), accounting and billing, and security management for each link in the network architecture for the business solution for at least one of: a manual operations mode, a mechanized operations mode, and a manual and mechanized operations mode; and

- determine a management processes cost comprising the network management processes cost and the service and customer management processes cost. ~~of comparing the business parameters for the plurality of network architectures comprises a step of reporting said business parameters for said network architectures over a pre-determined study period; and wherein the business solution comprises the network architecture with the least total expenditure, and said network architecture having NEs, CPE, and links from the same or different equipment suppliers; and having network management processes, and service and customer management processes from the same or different management processes suppliers.~~

38. (currently amended) [[A]] The method as described in claim [[37]] 32, wherein the step (z) comprises instructing the computer to tabulate and graphically chart the business parameters for said business solutions ~~of reporting the business parameters comprises a step of tabulating and graphically charting the business parameters for each of said network architectures~~ over said pre-determined study period.